



# To Assess the Effectiveness of Planned Teaching on the Knowledge Regarding Epilepsy in Children Among the Anganwadi Workers

Vaishali Taksande<sup>1</sup>, Nilesh Burbare<sup>2</sup>, Karishma Chaure<sup>2</sup>, Nitisha Deogade<sup>2</sup>, Shubham Deshmukh<sup>2</sup>, Jayshree Dhole<sup>2</sup>

<sup>1</sup>Department of OBGYNursing, Datta Meghe Institution Medical Sciences (Deemed to be University), Smt. Radhikabai Meghe Memorial College of Nursing, Sawangi Meghe, Wardha, Maharashtra, India; <sup>2</sup>Datta Meghe Institution Medical Sciences (Deemed to be University), Smt. Radhikabai Meghe Memorial College of Nursing, Sawangi Meghe, Wardha, Maharashtra, India.

## ABSTRACT

**Introduction:** Epilepsy is the most common clinical entity in neurology clinics with prevalence of 18.5 (0.8–49.0) per thousand with major causes perinatal injuries. There are very few epidemiological studies looking at the incidence of epilepsy from India. As per a recent study, 70 million people have epilepsy worldwide and nearly 90% of them are found in developing regions. The study also estimated a median prevalence of 1.54% (0.48–4.96%) for rural and 1.03% (0.28–3.8%) for urban studies in developing countries.

**Objective:** To assess the effectiveness of planned teaching on knowledge regarding epilepsy in children's among the Anganwadi female workers in selected Anganwadi.

**Methods:** The Descriptive evaluator approach was used in this study and the sampling technique was non-probability convenient sampling was used. Data was collected using a self-structured knowledge questionnaire and sample size was 110 Anganwadi female workers.

**Result:** Study shows that pretest knowledge of Anganwadi female worker 3(2.73%) had a poor level of knowledge score, 58(52.73%) had an average level of knowledge, 45(40.9%) had good knowledge and no one was in excellent knowledge score, whereas in post-test 65(59.09%) had very good knowledge score and 23(20.91%) had excellent knowledge score.

**Conclusion:** Neurologists, public health professionals, psychiatrists, psychiatric social worker, psychiatric nurse, and program managers need to join hands for prevention, improved care, and rehabilitation of persons with epilepsy in India.

**Key Words:** Planned teaching, Epilepsy, female workers, Anganwadi and knowledge

## INTRODUCTION

Epilepsy is one of the most frequent chronic disorders of childhood. The term epilepsy derives from Greek word 'Epilambavian' which means to take hold of or to seize. As per WHO intimates that 3-10 per 1000 of the total world population have epilepsy.<sup>1</sup> As children are growing age spend most of the time in school and school having frequent attack of seizure, large doses of antiepileptic drugs will interference of learning of the child.<sup>2</sup>

Among the pediatric age group, the prevalence of epilepsy is 18.5 (0.8–49.0) per thousand and major causes in children is perinatal injuries.<sup>3</sup> There are very few epidemiological studies looking at the incidence of epilepsy from India.

A state of Kerala with higher literacy rates better the public health awareness (4.9/1000).<sup>4</sup> A recent rural epilepsy surveillance program from Uttarakhand showed a prevalence rate of two or more meaningless seizures to be 7.5 per 1000.<sup>4</sup> A pediatric study from Kashmir valley shows prevalence rates of 3.74/1000 in males and 3.13/1000 in females.<sup>5</sup> A study conducted in Kolkata's urban population showed an annual incidence rate of 27.27 per 100,000 per year.<sup>6</sup> As per a recent study, 70 million people have epilepsy worldwide and nearly 90% of them are found in developing regions.<sup>7</sup> The study also estimated a median prevalence of 1.54% (0.48–4.96%) for rural and 1.03% (0.28–3.8%) for urban studies in developing countries.<sup>8</sup>

### Corresponding Author:

**Prof. Vaishali Taksande**, Department of OBGYNursing, Datta Meghe Institution Medical Sciences (Deemed to be University), Smt. Radhikabai Meghe Memorial College of Nursing, Sawangi Meghe, Wardha, Maharashtra, India. Phone: 09970423710, E-mail: vtaksande@gmail.com

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In this study we aimed to assess the effectiveness of planned teaching on knowledge regarding epilepsy in children's among the Anganwadi workers in selected. We will evaluate this by assessing the existing knowledge regarding epilepsy in children's among the Anganwadi female workers in selected Anganwadi.

## MATERIALS AND METHODS

The Descriptive evaluator approach was used in this study and the sampling technique was non-probability convenient sampling was used. The informed consent was taken from subjects and IEC letter no. is DMIMS (DU)/IEC/2017-18/6976. Data was collected using a self-structured knowledge questionnaire and sample size was 110 Anganwadi female workers.

### Selection Criteria

Inclusion criteria were those who are willing to participate in the study and available during the data collection and exclusion criteria are Anganwadi female worker those who are attended the same type of planned teaching before 6 months and those who are experience less than 6 months. The investigator visited selected Anganwadi in advance and obtained the necessary permission from the concerned authorities.

### Statistical Analysis

Descriptive statistics were used to assess the knowledge of the Anganwadi female worker and inferential statistics used to test the effectiveness of planned teaching and chi-square used to find out the association.

## RESULT

The percentage-wise distribution Anganwadi female workers with regards to their demographic characteristics. The data obtained to describe the sample characteristics including age, educational level, experiences in the year and monthly family income (Table 1).

**Table 1: Percentage-wise Distribution according to Anganwadi female workers demographical variables (n=110)**

Demographic Variables	No of ASHA workers	Percentage (%)
<b>Age in years</b>		
20-30	9	8.2
31-40	32	29.1
41-50	42	38.2
51-60	27	24.5

### Educational Level

Primary school	8	7.3
High school	78	70.9
Graduation	18	16.4
Post Graduation	6	5.5

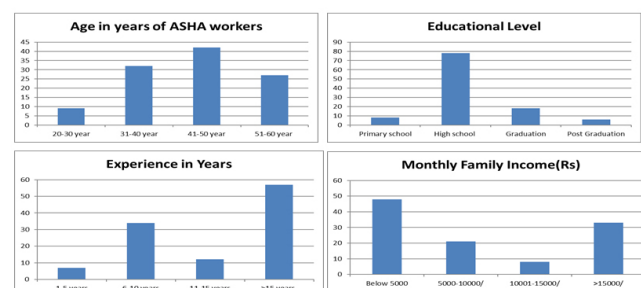
### Experience in Years

1-5 years	7	6.4
6-10 years	34	30.9
11-15 year	12	10.9
>15 years	57	51.8

### Monthly Family Income(Rs)

Below 5000	48	43.6
5000-10000/	21	19.1
10001-15000/	8	7.3
>15000/	33	30

In the present study it was found that out of 110 Anganwadi female worker Majority of 9(8.20%) of the Anganwadi female workers were in the age group of 20-30 years, 32(29.10%) in the age group of 31-40 years, 42 (38.20%) in the age group of 41-50 years and 27 (24.5%) were in the age group of 51-60 years. Anganwadi Female Workers according to their Education, 8(7.30%) of the Anganwadi female workers were educated up to primary school, 78(70.90%) were educated up to high school, 18 (16.40%) up to graduates and 6 (5.50%) were postgraduates. Anganwadi Female Workers according to their experience 7 (6.40%) of the Anganwadi female workers were having working experience of 1-5 years, 34 (30.90%) had an experience of 6-10 years, 12 (10.90%) had 11-15 years and 57 (51.80%) had an experience of more than 15 years. Anganwadi Female Workers according to their Income INR 48 (43.60%) of Anganwadi female workers had a monthly family income of below 5000 Rs, 21 (19.10%) between 5000-10000 Rs, 8 (7.30%) between 10000-15000 Rs and 33(30%) had a monthly family income of Rs. >15000, respectively.

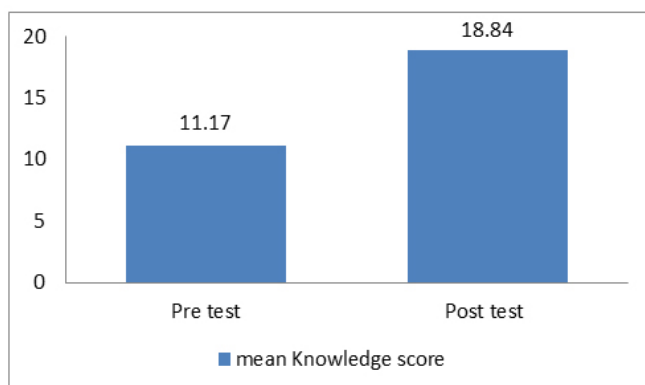


**Figure 1: Demographical Variable of Anganwadi female workers.**

**Table 2: Difference between knowledge score in pre-test and post-test of Anganwadi female workers.**

Overall	Mean	SD	Mean difference	t-value	p-value
Pre test	11.17	3.03			
Post-test	18.84	2.82	7.67±3.44	23.35	0.0001

The above table shows that the effectiveness of planned teaching on knowledge regarding epilepsy in children's among the Anganwadi female workers and the finding were in the pretest and post-test knowledge scores of Anganwadi Female workers regarding epilepsy in children. Pre-test Mean 11.17, and post-test mean are 18.84 effectiveness and student's paired 't' test is applied at 5% level of significance. The tabulated value for  $n=110-1$  i.e. 109 degrees of freedom was 1.98. The calculated 't' value i.e. 23.35 are much higher than the tabulated value at 5% level of significance for overall knowledge score of Anganwadi female workers which was a statistically acceptable level of significance. Hence, it is statistically interpreted that the planned teaching programme on overall knowledge regarding epilepsy in children among Anganwadi female workers in selected Anganwadi was effective (Figure 1 and Table 2).

**Figure 2:** Significance difference between the pre and post-test knowledge score

There is no significant association between knowledge score with a selected demographic variable such as age, education, experience and monthly income.

## DISCUSSION

In this present study majority of 9(8.20%) of the Anganwadi female workers were in the age group of 20-30 years, 32(29.10%) in the age group of 31-40 years, 42 (38.20%) in the age group of 41-50 years and 27(24.5%) were in the age group of 51-60years (Figure 2). A similar study which was conducted in to assess the effect of health education program on knowledge about epilepsy and its management

among primary schools teachers. They found the majority 27(18.9%) were age group in 20-30 years, 69 (48.3%) in the age group of 31-40 years, 38 (26.6%) in the age group of 41-50 years and 9 (6.3%) in the age group of 51-60 years.<sup>9</sup>

In our study finding Anganwadi female worker had heard about epilepsy with 47(49%) of them linking epilepsy to a central nervous system disturbance and some Anganwadi female worker thought that epilepsy was black magic 18(21%), evil spirit 28(25%), a curse 17(20%).<sup>9</sup> In this study shows that pre-test knowledge of Anganwadi female worker 3(2.73%) had a poor level of knowledge score, 58(52.73%) had average knowledge score, 45(40.9%) had good knowledge score, 4 (3.69%) had very good knowledge score and 0(0%) had excellent knowledge score. Minimum knowledge score in pre-test was 3 and maximum knowledge score in pretest was 20. Mean knowledge score in pretest was  $11.17 \pm 3.06$  and mean percentage of knowledge score in pre-test was  $41.38 \pm 11.33$  and post-test 0(0%) had a poor level of knowledge score, 1 (0.91) average knowledge score, 21 (19.09%) had good knowledge score, 65 (59.09%) had very good knowledge score and 23 (20.91%) had excellent knowledge score. Minimum knowledge score in post-test was 10, and maximum knowledge score in post-test it was 25. Mean knowledge score in post-test it was  $18.84 \pm 2.82$  and mean percentage of knowledge score in post-test it was  $69.79 \pm 10.46$  similar study done to assess the effectiveness of planned teaching program on knowledge regarding epilepsy and its management among the teachers working in the selected primary schools of Belgaum, Karnataka in 2013 in that pretest majority of subject 37(74%) had average knowledge, 9(18%) had good knowledge and 4 (8%) had poor knowledge whereas in the post-test majority of subjects 50(100%) had good knowledge.<sup>10</sup> Therefore, the planned teaching program on epilepsy ineffective to improve the knowledge of the subjects.

Based on the study that had been conducted, certain recommendations are given for future studies which are as follows,

1. A study can be done to compare the knowledge on the management of epilepsy in school children among rural and urban primary school teachers.
2. A study can be done to assess the knowledge, practice and attitude regarding the management of epilepsy in school children among teachers.
3. A study to evaluate a Video assisted teaching among primary school teachers regarding on management of epilepsy in school children.

## CONCLUSION

A mainly Anganwadi female worker is the first adult to witness a child having a convulsion. Every child's behaviour will vary according to the type of convulsion; therefore the Anganwadi female workers should have the basic

knowledge about the management of convulsion to provide first and foremost care to the child to save its life. As Anganwadi workers are involved in primary health care, they should be trained about the care of a child with epilepsy through regular in-service education program and refresher courses to identify the health problem among children

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**Conflict of Interest:** The authors have declared no conflicts of interest.

## REFERENCES

1. Epilepsy, 2007. <http://www.epilepsy.com>
2. Vinayan KP. Epilepsy, antiepileptic drugs and educational problems. *Indian Pediatr* 2006;43:786-794.
3. Aydin A, Ergor A, Ergor G, Dirik E. The prevalence of epilepsy amongst school children in Izmir, Turkey. *Seizure* 2002; 11(6):392-396.
4. Radhakrishnan K, Pandian JD, Santhosh Kumar T, Thomas SV, Deetha TD, Sarma PS, et al. Prevalence, knowledge, attitude, and practice of epilepsy in Kerala, South India. *Epilepsia* 2000; 41:1027-35.
5. Goel D, Agarwal A, Dhanai JS, Semval VD, Mehrotra V, Saxena V, et al. Comprehensive rural epilepsy surveillance programme in the Uttarakhand state of India. *Neurol India* 2009;57:355-6.
6. Shah PA, Shapoo SF, Koul RK, Khan MA. Prevalence of epilepsy in school-going children (6-18 years) in Kashmir Valley of North-west India. *J Indian Med Assoc* 2009; 107:216-8.
7. Banerjee TK, Ray BK, Das SK, Hazra A, Ghosal MK, Chaudhuri A, et al. A longitudinal study of epilepsy in Kolkata, India. *Epilepsia* 2010;51:2384-91.
8. Ngugi AK, Bottomley C, Kleinschmidt I, Sander JW, Newton CR. Estimation of the burden of active and life-time epilepsy: A meta-analytic approach. *Epilepsia* 2010;51:883-90.
9. Magda AM, Omaina ME. Effect of a health education program on knowledge about epilepsy and its management among primary schools teachers. *Int J Adv Res* 2015; 3(11):221- 227.
10. Malur K, Karnataka DS, Hiremath P, Naregal P. A study to assess the effectiveness of planned teaching programme on knowledge regarding epilepsy management in school children among primary school teachers working in selected primary schools. *Int J Sci Res* 2015;5(8):417-422.